World scientists deliberate latest research on maize insect pests which threaten global food security

The 27th International Working Group on Ostrinia and other maize pests (IWGO) Conference successfully took place in the Hotel Bellevue Terminus in Engelberg, Switzerland from 14-17 October 2019. Ninety-three scientists from Australia, China, the USA and various countries in Europe, Africa and South America, gathered to present their research and recommendations on how to tackle maize insect pests – including corn borers, rootworms, bollworms and fall armyworm – that threaten global food security.

The IWGO is a global working group under the International Organisation for Biological Control (IOBC Global) which has been meeting since 1968 to see how science can help protect maize – a staple food source for 900 million people in developing countries who earn less than US $2 a day.

As part of the conference led by CABI and convenor Dr Ulrich Kuhlmann, CABI’s Executive Director of Global Operations, many scientists from Africa and East Asia joined the conference for the first time due to the recent spread of fall armyworm to India, China and other parts of the eastern hemisphere, as well as most of all African countries.

The programme featured 10 scientific sessions, co-organized by scientists, with 55 talks and 18 poster presentations covering a range of interrelated topics during the three-day conference. Dr Zhenying Wang, from the Institute of Plant Protection, Chinese Academy of Agricultural Sciences, and Dr Tom Sappington, of the USDA-ARS Corn Insects & Crop Genetics Research Unit, served as co-convenors.
Meanwhile, a number of young scientists attended the conference and presented their research topics, and six of them received the IOBC Global Travel Award.

IOBC Global Travel Award winners 2019 (from left to right): Darija Lemic, University of Zagreb, Croatia; Antoine Pasquier, INRA & Bioline Agrosciences, France; Edimon Cheruiyot, University of Nairobi, Kenya; Jin-Cheng Zhou, Shenyang Agricultural University, China; and Yueqin Wang, Institute of Plant Protection, Chinese Academy of Agricultural Sciences, China. Julie A. Peterson, Department of Entomology, University of Nebraska, USA also won the award but is not shown in the photo.

Dr Kuhlmann said, “Maize is the most important food crop in Sub-Saharan Africa and Latin America. It is also a key crop in Asia. In Sub-Saharan Africa alone, maize is consumed by half the population and is the food of preference for 33 percent of all malnourished children”.

Dr Zhenying Wang said, “However, like many other staple foods it is not immune to the threats posed by a variety of crop pests – including the fall armyworm which can destroy between 40-70 percent of maize yield. This is the reason why the Chinese government pays the greatest attention to the new invader”.

Dr Tom Sappington concluded, “The IWGO Conference was an opportunity to share knowledge and best-practice Integrated Pest Management solutions – especially more sustainable biological controls where possible – to help millions of farmers around the world grow more and lose less to pests while at the same time enhancing their livelihoods and regional, national and global food security.”
In response to the current global fall armyworm threat, the IOBC global working group launched a subgroup under IWGO focusing on this devastating pest. The overall objective of this new subgroup is to establish an independent, internationally recognized platform for the exchange of research results, experiences and ideas on biological control-based pest management of fall armyworm. As a first action, the fall armyworm subgroup will organize skype/video conference meetings to facilitate the coordination of current international and national research efforts in the field of augmentative and classical biological control.

The IWGO Conference was sponsored by Syngenta, the MARA China-CABI Joint Laboratory for Biosafety and Corteva Agriscience.

The next and 28th IWGO Conference will be hosted in the U.S.A. and will take place in September/October 2021. Please mark this in your agendas!